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PATENT
Docket No. 509982003300

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

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Valerie Cohen
Valerie Cohen

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Joerg BISCHOFF et al.

Serial No.: 10/066,555

Filing Date: January 31, 2002

For: OVERLAY MEASUREMENTS USING
PERIODIC GRATINGS

Examiner: K. Shah

Group Art Unit: 2863

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**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record in the application.

01/13/2004 AWDNDAF1 00000015 031952 10066555

01 FC:1806 180.00 DA

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☒ **After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.**
 - ☐ A fee is required. A check in the amount of * is enclosed.
 - ☒ **A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.**
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of * is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.

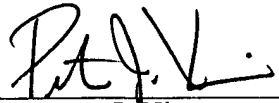
Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing 509982003300. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: January 7, 2004

Respectfully submitted,

By: 
Peter J. Yim
Registration No. 44,417

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Facsimile: (415) 268-7522

Form PTO-1449

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 509982003300

Application Number 10/066,555

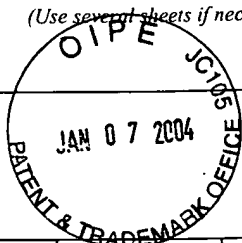
Applicant

Joerg Bischoff et al.

Filing Date January 31, 2002

Group Art Unit 2863

Mailing Date January 7, 2004



U.S. PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date | Document No. | Name | Class | Subclass | Filing Date If Appropriate |
|-------------------|----------|------------|--------------------|-------------------|-------|----------|----------------------------|
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| | 2. | 5/29/1990 | 4,929,083 | Brunner | | | |
| | 3. | 9/30/1997 | 5,672,520 | Natsume | | | |
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| | 16. | 1/2/2003 | US 2003/0002043 A1 | Abdulhalim et al. | | | |

FOREIGN PATENT DOCUMENTS

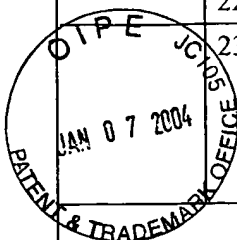
| Examiner Initials | Ref. No. | Date | Document No. | Country | Class | Subclass | Translation YES NO |
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| | 20. | 6/29/1988 | 0 272 853 A2 | EPO | | | |
| | 21. | 3/28/2002 | 02/25723 A2 | WO | | | |

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| | | |
|--|------------------------------------|-------------------------------|
| Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i> | Docket Number 509982003300 | Application Number 10/066,555 |
| | Applicant Joerg Bischoff et al. | |
| | Filing Date January 31, 2002 | Group Art Unit 2863 |
| | Mailing Date January 7, 2004 | |



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|-----|------------|--|----|--|--|---|--|
| 22. | 12/4/1997 | 97/45773 | WO | | | | |
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OTHER DOCUMENTS

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| Examiner Initials | Ref. No. | Title |
|-------------------|----------|--|
| | 24. | Neal T. Sullivan, Semiconductor Pattern Overlay, 15 pages, Digital Equipment Corp., Advanced Semiconductor Development, Hudson, MA 01749-2895 |
| | 25. | Lifeng, Li "Symmetries of Cross-Polarization Diffraction Coefficients of Gratings." <i>J. Opt. Soc. Am. A</i> /Vol.17, No. 5 (2000). |
| | 26. | Bischoff, J. et al. "Light Diffraction Based Overlay Measurement." <i>Proc. SPIE</i> Vol. 4344, pg. 222-233, <i>Metrology, Inspection, and Process Control for Microlithography XV</i> , (2001). |

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